WRF Modeling Training Workshop Wednesday 3 – Saturday 6 October, 2007

Wednesday Welcome and Introduction to WRF

- 08:00 Registration and Coffee
- 09:00 Opening Ceremony
- 09: 45 Goals, Logistics, Participant Introductions

10:15 Coffee Break

10:30 Introduction to Mesoscale Models

Robert Rozumalski, Eric Altshuler, and Vadlamani Kumar

12:30 Lunch Break

14:00 Introduction to WRF EMS

Robert Rozumalski, Eric Altshuler, and Vadlamani Kumar

- WRF EMS Introduction
- Computer resources
- Brief Tour WRF EMS
- Steps in Running EMS
- WRF EMS Installation

16:00 Coffee Break

Practical Sessions

Robert Rozumalski, Eric Altshuler, and Vadlamani Kumar

16:15 Practical Session-1: – Installation and Benchmarking WRF EMS

- Verify hardware and software requirements
- Step-by-step installation instructions from the User Guide
- Setting up the domain
- Setting up the preprocessing, run-time and postprocessing environments
- Test Run Benchmark Case.

18:00 End of Day

Thursday

- 08:00 **Follow-on Discussion**
- 08:30 WRFEMS (Cont'd)
 - SI GUI

- Introduction to wrf_prep
- Introduction to wrf_run
- Introduction to wrf_post

10:15 Coffee Break

10:30 14:00 Practical Session-2: Simple modeling experiment

12:30 Lunch Break

14:00 WRF EMS (Cont'd)

- Introduction to wrf autopost
- Wrf_update
- Running on local cluster
- Display packages and Tutorial

15:15 Introduction to Local Area Modeling

16::00 Simulated Reflectivity

16:30 Coffee Break

16:45 Practical Session-3: Sensitivity Studies

- Selecting an event
- Acquiring and preparing the input data
- Setting up the domain
- Configuring the preprocessing, run-time and postprocessing environments
- Performing the Model Run sequence

18:00 End of Day

Friday

- 08:00 Follow-on Discussion
- 08:30 Practical Session-3: Data interrogation
- 09:30 Practical Session-3: Class Presentations

11:00 Coffee Break

11:15 Practical Session-4: Nested simulation

12:30 Lunch

14:00 **Real-time Simulations**

16:00 Coffee Break

16:15 Practical Session-5: Real-time Simulations (Cont'd)

18:00 End of Day

Saturday

08:00 Follow on Discussion

08:30 Practical Session-5: Continued- Data interrogation

10:00 Coffee Break

10:15 Practical Session-5: Class Presentations

12:30 Lunch Break

Special Session WRF Ensembles

14:00 Introduction to WRF Ensembles *Vadlamani Kumar and Wassila Thiaw*

- Overview of Regional Ensemble Modeling.
- Member selection process.
- Preparing the input member(s) data from a GEFS run
- Thresholds and computing probability fields
- Spaghetti diagrams
- Mean and Spread

16:00 Discussions

16:30 Adjourn